



**EXHIBIT A: Translation of SEQ ID NO:1525 from Tang et al.**

**I. Original sequence:**

> - 886 nucleotides

gtggactggattagctgcgagccctggaagctgcctgtccttctccctgtgcttaacca  
gaggtgcccattgggttgacaatgaggtggtcacagcagcactgttactgggtctcatg  
atggtggtcactggagacgaggatgagaacagcccggtgtgccatgaggccctcttgga  
gaggacaccctcttttgccagggccttgaagttttctaccagagttggggaacattggc  
tgcaagggtgttctctgattgtaacaactacagacagaagatcacctcctggatggagccg  
atagtcaagttcccgggggcggtggacggcgcaacctatatcctggtgatggtggatcca  
gatgcccctagcagagcagaaccagacagagattctggagacattggctggtaacagat  
atcaagggcgccgacctgaaggaaggggaagattcagggccaggagttatcagccctacca  
ggctccctccccaccggcacacagtggtccctccatcgctaccaagtctcttctctatct  
tcaggaagggaaaagtcatctctctccttcccaaggaaaacaaaactcgaggtccttggg  
aatggacagatttctgaaccgtttccacctgggcgaacctgaagcaagcaccagttca  
tgaccagaactaccaggactcaccaaccctccagggtcccagagaaagggccagcgagc  
ccaagcacaaaaaccaggcgagatagctgcctgctagatagccggctttgccatccggg  
catgtggccacactgcccaccaccgacgatgtgggtatggaacccctctggatacagaa  
ccccttcttttccaaataaaaaaaaaaatcatccaggaaaaaaaaaaaa

**II. Translation in forward direction:**

ValAspTrpIleSerCysGlyAlaLeuGluAlaAlaCysProSerProCysAlaOc\*Pro  
GluValProMetGlyTrpThrMetArgLeuValThrAlaAlaLeuLeuLeuGlyLeuMet  
MetValValThrGlyAspGluAspGluAsnSerProCysAlaHisGluAlaLeuLeuAsp  
GluAspThrLeuPheCysGlnGlyLeuGluValPheTyrProGluLeuGlyAsnIleGly  
CysLysValValProAspCysAsnAsnTyrArgGlnLysIleThrSerTrpMetGluPro  
IleValLysPheProGlyAlaValAspGlyAlaThrTyrIleLeuValMetValAspPro  
AspAlaProSerArgAlaGluProArgGlnArgPheTrpArgHisTrpLeuValThrAsp  
IleLysGlyAlaAspLeuLysGluGlyLysIleGlnGlyGlnGluLeuSerAlaLeuPro  
GlySerLeuProHisArgHisThrValAlaPheHisArgTyrGlnValLeuCysLeuSer  
SerGlyArgGluLysSerSerLeuSerPheProArgLysThrLysLeuGluAlaLeuGly  
LysTrpThrAspPheOp\*ThrValSerThrTrpAlaAsnLeuLysGlnAlaProSerSer  
Op\*ProArgThrThrArgThrHisGlnProSerArgLeuProGluLysGlyProAlaSer  
ProSerThrLysThrArgArgArgAm\*LeuProAlaArgAm\*ProAlaLeuProSerGly  
HisValAlaThrLeuProThrThrAspAspValGlyMetGluProProLeuAspThrGlu  
ProLeuLeuPheGlnIleLysLysLysSerSerArgLysLysLys

### III. Nucleotide/Amino Acid alignment:

>	-	886	nucleotides
Translation	in	forward	direction:
DNA: gtggactggattagctgcgagccctggaagctgcctgtccttctccctgtgcttaacca			
+1fr: ValAspTrpIleSerCysGlyAlaLeuGluAlaAlaCysProSerProCysAlaOc*Pro			
DNA: gaggtgcccatgggttgacaatgaggctgggtcacagcagcactggttactgggtctcatg			
+1fr: GluValProMetGlyTrpThrMetArgLeuValThrAlaAlaLeuLeuLeuGlyLeuMet			
DNA: atggtggctcactggagacgaggatgagaacagcccgtgtgcccatgaggccctcttggac			
+1fr: MetValValThrGlyAspGluAspGluAsnSerProCysAlaHisGluAlaLeuLeuAsp			
DNA: gaggacaccctcttttgcagggccttgaagttttctaccagagttggggaacattggc			
+1fr: GluAspThrLeuPheCysGlnGlyLeuGluValPheTyrProGluLeuGlyAsnIleGly			
DNA: tgcaaggttggtcctgattgtaacaactacagacagaagatcacctcctggatggagccg			
+1fr: CysLysValValProAspCysAsnAsnTyrArgGlnLysIleThrSerTrpMetGluPro			
DNA: atagtcaagttcccggggccgtggacggcgcaacctatatcctggatggatggatcca			
+1fr: IleValLysPheProGlyAlaValAspGlyAlaThrTyrIleLeuValMetValAspPro			
DNA: gatgcccttagcagagcagaacccagacagagattctggagacattggctggtaacagat			
+1fr: AspAlaProSerArgAlaGluProArgGlnArgPheTrpArgHisTrpLeuValThrAsp			
DNA: atcaagggcgccgacctgaaggaaggggaagattcagggccaggagttatcagccctacca			
+1fr: IleLysGlyAlaAspLeuLysGluGlyLysIleGlnGlyGlnGluLeuSerAlaLeuPro			
DNA: ggctccctccccaccggcacacagtggccttccatcgctaccaagttctttgtctatct			
+1fr: GlySerLeuProHisArgHisThrValAlaPheHisArgTyrGlnValLeuCysLeuSer			
DNA: tcaggaagggaaaagtcattctctctccttcccaaggaaaacaaaactcgaggctcttggga			
+1fr: SerGlyArgGluLysSerSerLeuSerPheProArgLysThrLysLeuGluAlaLeuGly			
DNA: aaatggacagatttctgaaccgtttccacctgggccaacctgaagcaagcaccagttca			
+1fr: LysTrpThrAspPheOp*ThrValSerThrTrpAlaAsnLeuLysGlnAlaProSerSer			
DNA: tgaccacagaactaccaggactaccaaccctccaggctcccagagaaagggccagcgagc			
+1fr: Op*ProArgThrThrArgThrHisGlnProSerArgLeuProGluLysGlyProAlaSer			
DNA: ccaagcacaaaaccaggcggagatagctgcctgctagatagccggctttgccatccggg			
+1fr: ProSerThrLysThrArgArgArgAm*LeuProAlaArgAm*ProAlaLeuProSerGly			

DNA: catgtggccacactgcccaccaccgacgatgtgggtatggaaccccctctggatacagaa  
+1fr: HisValAlaThrLeuProThrThrAspAspValGlyMetGluProProLeuAspThrGlu

DNA: ccccttcttttccaaataaaaaaaaaaatcatccaggaaaaaaaaaaaa  
+1fr: ProLeuLeuPheGlnIleLysLysLysSerSerArgLysLysLys